

WHAT IS CLAIMED IS:

1. An optical fiber comprising:

a core region having a first refractive index with a
UV photosensitivity;

5 an inner cladding region surrounding said core region
and having a second refractive index lower than said first
refractive index with a UV photosensitivity; and

10 an outer cladding region surrounding said inner
cladding region and having a third refractive index lower
than said first refractive index;

wherein said UV photosensitivity in said inner cladding
region has a deviation of $\pm 10\%$ or less.

2. An optical fiber according to claim 1, wherein
the difference between an average value of UV

15 photosensitivity in said core region and an average value
of UV photosensitivity in said inner cladding region is 10%
or less.

20 3. An optical fiber according to claim 1, wherein
the deviation of UV photosensitivity over both of said core
region and said inner cladding region is $\pm 10\%$ or less.

4. An optical fiber according to claim 1, wherein
the deviation of UV photosensitivity over both of said core
region and said inner cladding region is $\pm 5\%$ or less.

25 5. A fiber grating device comprising the optical
fiber according to claim 1, said optical fiber having a
refractive index modulation formed in a predetermined area

along a longitudinal direction thereof.

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